A. The FCC Should Define Product Markets Based On A Careful Analysis Of Customer Demand Patterns.

The FCC should follow the methodology set forth in the FTC-DOJ Horizontal Merger Guidelines[17] for defining product markets. Under that methodology, product markets are defined based on customer demand.[18] Specifically, a product market is a product or group of products "such that a hypothetical profit-maximizing firm that was the only present and future seller of those products ('monopolist') likely would impose at least a 'small but significant[19] and nontransitory' increase in price" ("SSNIP").[20] For example, if a monopolist of product A significantly increases the price for A, some customers might pay the higher price, some might switch to an alternative and some might cease purchasing the category of service altogether. If enough customers continue to pay the higher price such that the resulting profits outweigh losses caused by customers who switch to alternatives or who cease purchasing the category of product

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[17] *See* U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines (Apr. 2, 1992, rev. Apr. 8, 1997) ("FTC-DOJ Horizontal Merger Guidelines" or "Guidelines").

[18] *Id.* § 1.0 ("Market definition focuses solely on demand substitution factors -- i.e., possible consumer responses."). In particular, the inquiry concerns the extent to which customer demand is elastic or inelastic. If buyers are more likely to switch products or eliminate purchases all together in response to a price increase, they are considered to have "elastic" demand; if they are less likely to switch or eliminate purchases all together in response to a price increase, they have "inelastic demand." *See* PHILIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 507(a) (3d ed. 2007) ("*Areeda*") ("[T]he price elasticity of demand measures the percentage change of the quantity demanded of some good in response to a given price change."). Demand substitutability and elasticity are also key to measuring market power. *See id.* ¶ 506(a) ("[T]he degree of market power depends on the response of buyers to price changes. Greater responsiveness (greater elasticity of demand) minimizes market power.").

[19] The Guidelines suggest that a five percent increase in price would be considered "significant" in most cases. Guidelines § 1.11.

[20] *See id.* § 1.11.

entirely, then product A constitutes a separate product market. On the other hand, if a price increase in product A would yield a net loss to the hypothetical monopolist,[21] then the regulator must expand the products in the product market by including the closest substitutes to A.[22] Once the group of products at issue would enable a hypothetical monopolist to profit from a significant and nontransitory price increase, the parameters of the product market are established.

Importantly, alternative products that some customers, even a significant percentage of customers, buy in response to a price increase are excluded from the

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[21] The inflection point between profit and loss is reached at the "critical sales loss." *See Areeda* ¶ 536; *id.* n.1 ("The critical sales loss is defined as the decrease in sales resulting from a hypothetical price increase that is just large enough to make the price increase unprofitable.") (internal cites omitted)); *see also* PHILIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 562(d) (Supp. 2009) (citing *FTC v. Whole Foods Market, Inc.*, 502 F.Supp. 2d 1 (D.D.C. 2007)) ("There is a profit detriment to the price increase equal to the product of the per unit gross margin and the number of units lost. But there is also an economic gain from the increased gross margin earned from the higher price on each remaining unit sold. The 'critical loss' is the amount of lost sales at which the economic detriment equals the economic gain. It is a 'critical' loss because any greater loss will result in the economic detriment exceeding the economic gain, thereby rendering the price increase unprofitable.").

[22] *See* Guidelines § 1.11 ("Specifically, the Agency will begin with each product (narrowly defined) produced or sold by each merging firm and ask what would happen if a hypothetical monopolist of that product imposed at least a 'small but significant and nontransitory' increase in price, but the terms of sale of all other products remained constant. If, in response to the price increase, the reduction in sales of the product would be large enough that a hypothetical monopolist would not find it profitable to impose such an increase in price, then the Agency will add to the product group the product that is the next-best substitute for the merging firm's product."); *see also Areeda* ¶ 506(c) ("Whether a defendant accounting for the entire production of one product has market power notwithstanding the availability of...substitutes depends on several factors: (i) Within the range of output choices realistically available to the defendant, how many buyers consider other products to be interchangeable? (ii) At what relative prices do those buyers consider the products interchangeable? (iii) What are the relative costs of the defendant and those producing the substitute commodities? (iv) Can the defendant discriminate in price among buyers by charging a lower price only to those for whom other products are highly interchangeable?").

product market if such substitution is insufficient to prevent the price increase from yielding a profit. There are therefore many circumstances in which a product market (consisting of product A) excludes a product (call it product Z) even though a large (but insufficient) percentage of purchasers of A view Z as a substitute for A. For example, the FTC found that so-called "superpremium" ice cream constitutes a separate product market because enough ice cream purchasers would continue to purchase superpremium ice cream even if the price were increased such that a price increase would be profitable.[23] There is little doubt that many ice cream purchasers view premium and non-premium ice cream as a substitute for superpremium ice cream, but there are not enough such customers to include premium or non-premium ice cream in the market for superpremium ice cream.

Furthermore, as Dr. Kent Mikkelsen has explained in a paper filed in the 4-MSA docket, customers who have in the past abandoned product A in favor of product Z are irrelevant to the inquiry of whether product Z belongs in the same product market as product A.[24] The relevant inquiry for product market definition purposes is whether a

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[23] *See DOJ-FTC Commentary on the Horizontal Merger Guidelines* (Mar. 2006), *available at* http://www.usdoj.gov/atr/public/guidelines/215247.pdf ("*Commentary*") at 6 (discussing *Nestle-Dryer's* (FTC-2003)) ("Ice cream is differentiated on the basis of the quality of ingredients. Compared to premium and non-premium ice cream, superpremium ice cream contains more butterfat, less air, and more costly ingredients. Superpremium ice cream sells at a substantially higher price than premium ice cream. Using scanner data, Commission staff estimated demand elasticities for the superpremium, premium, and economy ice cream segments. Staff's analysis showed that a hypothetical monopolist of superpremium ice cream would increase prices significantly. This, together with other documentary and testimonial evidence, indicated that the relevant market in which to analyze the transaction was superpremium ice cream.").

[24] *See generally* White Paper of Kent. W. Mikkelson, *Mobile Wireless Service to "Cut the Cord" Households in FCC Analysis of Wireline Competition* at 3, attached to Letter of Brad Mutschelknaus *et al.*, Counsel, Covad *et al.*, to Marlene H. Dortch, Secretary, FCC, WC Dkt. No. 07-97 (filed Apr. 22, 2008).

hypothetical monopolist could profitably increase the price paid by *existing* purchasers of product A.[25] Customers that no longer purchase A are not part of the inquiry.

In fact, after the loss of market share to producers of Z, it might be easier for a producer of A to impose a price increase because a substantial portion of the market that would view the products as substitutes has already switched to product Z. Following the shift to Z, the remaining buyers of product A are likely to have less elastic demand and are therefore less likely to switch because of a price increase in product A. Therefore, the producer of A will be able to set a new, higher profit-maximizing price for those remaining customers. As Dr. Stanley Besen has explained elsewhere,

> [A] firm that loses customers because new substitutes become available may have even greater market power over its remaining customers than it did initially, although its profits would, nonetheless, decline. This can occur if the customers that the firm retains are less sensitive to price increases than those that had switched to the substitutes. In such cases, the *increase* in competition can actually lead to an *increase* in price.[26]

For example, empirical studies examining market prices of brand name drugs following entry by producers of lower priced generic drugs show that the market power of makers of brand name drugs actually increases following generic entry.[27] This is the case even where generic drugs attract a substantial market share (40-50 percent) of the market and the price of generic substitutes continues to decline as additional generic

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[25] *See id.* at 8-9.

[26] *See* Declaration of Stanley M. Besen ¶ 9 ("*Besen Market Power Declaration*"), attached to ex parte letter of Thomas Jones, Counsel, tw telecom inc., to Marlene H. Dortch, Secretary, FCC, WC Dkt. No. 05-25 (filed July 9, 2009) ("*Special Access Letter*").

[27] *See Besen Market Power Declaration* n.15 ("A widely cited claim is that pharmaceutical companies may be able to raise prices to customers who insist on branded products after suppliers of generics have attracted many of their other customers. This can occur if customers who strongly prefer the branded product are less sensitive to price increases that the customers who switched to generics.").

entry occurs.[28] A substantial portion of drug purchasers are simply unwilling to switch to lower price generics, increasing the brand name producer's market power over the non-switchers and permitting an increase in price over the portion of the market that highly values brand name drugs.[29] The authors of one study found that their results were "consistent with notions of market segmentation on the demand side with buyers with differing sensitivities to price."[30]

These principles and studies have important implications for product market definitions in the UNE forbearance context. The touchstone of the Section 10 standard is that forbearance shall only be granted where the legal requirement in question is no longer necessary to ensure that rates are just, reasonable and not unjustly or unreasonably discriminatory. The product market definition methodology discussed herein hews closely to this principle by identifying the category of customers who would be harmed by a significant price increase. It does not matter to such customers that other customers may view alternatives as substitutes. Rather, if there are a sufficiently high number of customers who will continue to purchase A (e.g., wireline telephone service) even after a substantial price increase such that the price increase will be profitable, then A must be

[28] *See* Richard G. Frank and David S. Salkever, *Generic Entry and the Pricing of Pharmaceuticals*, 6 J. of Econ. & Mgmt. Strategy 75, 89 (No. 1, Spring 1997) ("Frank & Salkever"); *see id.* ("[I]t appears that more competition among generic drug producers is linked to price reductions for those [generic] drugs....[i]ncreased competition from generics is not accompanied by lower prices for brand name drugs....In fact, the evidence we did uncover is consistent with small price rises being tied to expanded competition.").

[29] *See* D.R. Work & M.E. Domino, *The Cost of Prescription Drugs: Rising Concerns over Equity, Fairness and Access to Essential Care*, 64 N.C. Med. J. 270, 271 (Nov./Dec. 2003) ("As Frank and Salkever (1997) have pointed out, producers of brand name products have the ability to retain the least sensitive component of demand and can raise prices to this segment in order to maximize their profits.").

[30] Frank & Salkever at 90.

viewed as a separate product market from Z (e.g., wireless telephone service). Indeed, as explained, it may well be that these customers are even more susceptible to price increases if a substantial portion of a legacy customer base has already abandoned the service in question for an alternative (this is likely the case where a significant number of customers has abandoned wireline telephone service in favor of wireless service).

While this discussion has focused on the SSNIP test, there are likely to be many circumstances in which the FCC lacks the necessary pricing information to apply this test as a technical matter. In these circumstances, the Commission should review other evidence that bears on whether a price increase would be profitable, such as the prices and characteristics of the services and whether a company's own marketing and advertising materials and strategies reflect its views as to the extent to which customers view products as substitutes.[31] If an incumbent LEC consistently increases the price for wireline telephone service, for example, it clearly believes that enough existing wireline customers will continue to purchase the service after the price increase to make increasing the price profitable.

[31] For example, the Joint Commenters have utilized this kind of information to demonstrate that residential telephone services belong in a different product market from business telephone services. *See* Letter from Thomas Jones *et al.*, Counsel, One Communications Corp. *et al.*, to Marlene H. Dortch, Secretary, FCC, WC Dkt. Nos. 08-24 & 08-49, at 13-16 (filed Apr. 14, 2009) ("Joint Commenters' April 14th UNE Forbearance Ex Parte Letter") (explaining that: (1) the service features and characteristics demanded by and marketed to even the smallest business customers are qualitatively differnt from those demanded by and marketed to residential customers; (2) the differences in the levels of customer support and features demanded by residential and small business customers are reflected in the different prices charged for those services; (3) competitors' practices for marketing and advertising to small business customers are different than would be the case if they sought to acquire residential customers; (4) competitors such as Integra and One Communications provide more proactive and personalized customer service to their business customers than they would if they served residential customers; and (5) competitors that serve only business customers must design their networks differently than would be the case if they served residential customers).

Finally, it is important to emphasize that, in defining product markets for purposes of UNE forbearance proceedings, the FCC must assess relevant wholesale and retail markets separately. This is because the demand characteristics of these sectors are completely different. Wholesale customers seek access to network elements that they can combine with their own networks in order to provide finished services to end user customers. The "products" at issue are therefore stand-alone loop and transport facilities and the wholesale operations support systems that are necessary to make them available. In contrast, retail customers demand finished retail services for which network elements are merely inputs. Given that wholesale network elements and retail services could not possibly be viewed as substitutes, the two types of service must be analyzed separately.

B. The FCC Should Utilize MSAs As The Relevant Geographic Area For Purposes of UNE Forbearance.

As the Commission has often recognized, the relevant geographic market for wireline telecommunications services such as the loops that are subject to UNE forbearance is a point-to-point connection. But it is not feasible for the FCC to conduct a competition analysis of each separate point-to-point circuit in the market.[32] Accordingly, the FCC must utilize a larger geographic area that sensibly aggregates multiple point-to-point circuits.[33] As the Joint Commenters have explained in connection with the competitors' jointly proposed standard of review for UNE forbearance petitions, MSAs

[32] *See, e.g., In re Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area et al.*, Second Report and Order in CC Docket No. 06-149 and Third Report and Order in CC Docket No. 96-61, 12 FCC Rcd. 15756, ¶ 5 (1997) ("We define the relevant geographic market for interstate, domestic, long distance services as all possible routes that allow for a connection from one particular location to another particular location (*i.e.*, a point-to-point market).").

[33] Indeed, the Commission has recognized that "assessing market power in each individual point-to-point market would be administratively impractical and inefficient." *See id.* ¶ 66.

are the most appropriate means of aggregating geographic markets. This is because, in order to establish minimum efficient scale, a competitor must obtain access to loop facilities on an MSA-wide basis.[34] Thus, the competitive effects of eliminating UNEs would likely be experienced throughout an MSA. It makes sense therefore to assess the extent to which UNEs are available on an MSA-wide basis.

C. The FCC Should Assess The Level Of Competition By Either Applying The Competitors' Proposed Standard Or By Conducting A Competition Analysis.

In assessing the level of competition within the relevant product market in an MSA, the Commission should take one of two approaches. It should adopt the competitors' proposed standard of review or undertake a competition analysis informed by the FTC-DOJ Horizontal Merger Guidelines in the relevant market. In both cases, the objective should be to ensure that forbearance is only granted in markets in which the incumbent is unable to exercise market power, either unilaterally or as a result of coordinated conduct, to charge prices significantly above cost.

1. The Competitors' Proposed Standard.

On March 26, 2009, the Joint Commenters, as part of a coalition of competitors, proposed a new standard for FCC consideration of incumbent LEC petitions for forbearance from unbundling obligations.[35] Under the Proposed Standard, a UNE

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[34] *See* Joint Commenters' April 14th UNE Forbearance Ex Parte Letter at 9-11 (explaining that CLECs that purchase wholesale inputs to provide downstream retail services can generally achieve minimum efficient scale only if they serve geographic areas that are approximately the size of an MSA and that, accordingly, the competitive effects of eliminating UNEs should be assessed on an MSA basis).

[35] *See* Letter from A. Lipman *et al.*, Counsel, Alpheus Communications, L.P. *et al.*, to Marlene H. Dortch, Secretary, FCC, *In re Petition of Verizon New England for Forbearance Pursuant to 47 U.S.C. § 160(c) in Rhode Island,* WC Dkt. No. 08-24; *Petition of the Verizon Telephone Companies for Forbearance Pursuant to 47 U.S.C. §*

forbearance petition should be granted in an MSA only where the following conditions exist:

> (1) at least two facilities-based non-ILEC wireline competitors in the wholesale loop market, each of which has actually deployed end-user connections to 75 percent of end-user locations in the relevant product market, each of which has deployed wholesale operations support systems sufficient to support the wholesale demand in the relevant product market, and each of which has garnered at least 15 percent of wholesale loop market share in the relevant product market ("Wholesale Test");
>
> or
>
> (2) at least 75 percent of end-user locations are served by two or more facilities-based non-ILEC wireline competitors that offer retail service in the relevant downstream product market via loops that the competitors have actually deployed, and there are at least two facilities-based competitors to the ILEC that have each garnered at least 15 percent of retail market share in the relevant product market ("Retail Test").

The Proposed Standard establishes a sound, administrable and predictable framework for consideration of UNE forbearance petitions. It establishes clear criteria for identifying the firms that should be "counted" as competitors under the Wholesale and Retail Tests.[36] The Proposed Standard also utilizes clear benchmarks and allows forbearance to be granted only where the incumbent LEC faces actual competition from multiple (i.e., at

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160(c) in Cox's Service Territory in the Virginia Beach Metropolitan Statistical Area, WC Dkt. No. 08-49 (filed Mar. 26, 2009) (setting forth the Proposed Standard).

[36] *See* Joint Commenters' April 14th UNE Forbearance Ex Parte Letter at 16-18 (explaining why (1) under the Proposed Standard, a facilities-based non-ILEC competitor must be a *wireline* provider in order to qualify as a competitor; (2) under the Proposed Standard, each competitor must have captured at least 15 percent of the market share in the relevant product market; (3) under the Wholesale Test of the Proposed Standard, each facilities-based non-ILEC wireline competitor must have *actually deployed* end-user connections to 75 percent of the relevant end-user locations in an MSA; (4) under the Wholesale Test, each facilities-based non-ILEC wireline competitor must have developed sufficient wholesale operations support systems to accommodate the wholesale demand in the relevant product market; and (5) under the Retail Test of the Proposed Standard, at least 75 percent of end-user locations must be served by two or more facilities-based non-ILEC wireline competitors using loops that the competitors have actually deployed).

least two) competitors, each of which has captured at least 15 percent of the market share in the relevant product market, throughout the MSA.[37]

The Commission could either use the Proposed Standard as a bright line test for assessing UNE forbearance petitions or as a presumption under which an MSA that meets the criteria in the Proposed Standard would be presumed to be eligible for forbearance whereas an MSA that does not meet the criteria would be presumed to be ineligible for forbearance. Either way, application of the Proposed Standard would be relatively easy for the Commission to administer and would give both incumbent LEC petitioners and their competitors the benefit of greater transparency and predictability. Such an approach would also further the goals underlying the FCC's recently adopted forbearance procedural rules.[38] As the Commission recently held, forbearance proceedings should be more transparent,[39] "more manageable for the Commission" and "more predictable" for the parties involved.[40] The competitors' Proposed Standard would achieve these objectives.

[37] *See id.* at 18-25 (explaining that a post-forbearance duopoly structure would likely result in supra-competitive prices and other competitive harms and that, at a minimum, three facilities-based competitors are necessary to prevent such harms); *see also* Letter from Thomas Jones, Counsel, One Communications Corp. *et al.*, to Marlene H. Dortch, Secretary, FCC, WC Dkt. Nos. 08-24 & 08-49, at 2-10 (filed Apr. 23, 2009) ("Joint Commenters' April 23rd UNE Forbearance Ex Parte Letter") (explaining why the Proposed Standard's requirement that at least two facilities-based wireline competitors to the incumbent LEC, each of which has a 15 percent market share in the relevant product market, must be present before forbearance can be granted is sound from both a legal and an economics perspective).

[38] *See generally In re Petition to Establish Procedural Requirements to Govern Proceedings for Forbearance Under Section 10 of the Communications Act of 1934, as Amended*, Report and Order, 24 FCC Rcd. 9543 (2009).

[39] *Id.* ¶¶ 10, 24.

[40] *Id.* ¶ 12.

2. Competition Analysis.

While the Proposed Standard would fully meet the mandates of Section 10, there are other appropriate ways in which the FCC can examine whether competition is sufficient in a market to warrant forbearance. The most obvious alternative approach would be a market competition analysis modeled, to the extent possible, on the manner in which the level of competition in a market is analyzed under the FTC-DOJ Horizontal Merger Guidelines. The relevant components of that analysis are discussed below.

Potential Entry. The Guidelines differentiate between so-called "committed entry," which is entry that requires "expenditure of significant sunk costs of entry and exit" and so-called "uncommitted entry," which is entry that does not require significant sunk costs. As the FCC has held, the deployment of loop and transport facilities requires substantial investment in sunk costs.[41] Accordingly, the principles applicable to committed entry should be applied when considering potential entry in a UNE forbearance proceeding.

In analyzing potential committed entry, the Guidelines focus on three separate factors: whether entry would be (1) timely, (2) likely, and (3) sufficient in magnitude, character and scope to counteract the competitive effects of concern (in this case, the

[41] *See In re Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Order on Remand, 20 FCC Rcd. 2533, ¶ 72 (2004) ("*TRRO*") ("The deployment of transport facilities involves substantial fixed and sunk costs. Once a carrier deploys fiber on a route, that fiber cannot be moved to another location."); *id.* ¶ 150 ("The economics of deploying loops are determined by the costs associated with such deployment and the potential revenues that can be recouped from a particular customer location. Competitive LECs face large fixed and sunk costs in deploying competitive fiber, as well as substantial operational barriers in constructing their own facilities.").

elimination of competition as the result of forbearance).[42] Only when all three factors are met will the DOJ and FTC consider the entrant's effect on the market.

Entry is generally considered "timely" if it occurs within two years "from initial planning to significant market impact."[43] Time to entry includes the time to complete all preliminary steps, including product development and the time necessary to develop a reputation such that customers will consider the product.[44]

Entry is "likely" if it "would be profitable at pre merger prices [in this case at pre-forbearance prices] and if such prices could be secured by the entrant."[45] Profitability is dependant upon the entrant's ability to achieve minimum viable scale ("MVS"). MVS is the "smallest average annual level of sales that the committed entrant must persistently achieve for profitability at pre-merger prices."[46] MVS will be large when the fixed costs of entry are significant and largely sunk, as is the case for facilities-based entry into telecommunications markets.[47]

Several factors are present in markets in which incumbent LECs seek forbearance that make it extremely unlikely that a future entrant could achieve MVS. For example, it

[42] *See* Guidelines § 3.0.

[43] *See id.* § 3.2.

[44] *Id.*; *Commentary* at 46.

[45] Guidelines § 3.3. In determining whether entry is appropriate, a firm must also take into account that its entry will increase supply in the market, which, all things being equal, will drive down prices below the level prior to their entry. *See Areeda* ¶ 421(a).

[46] Guidelines § 3.3.

[47] *Id.* n.31. Costs are considered sunk if "they cannot be recovered by reversing the entry decision." *Commentary* at 37. Sunk costs include not only the costs of tangible assets that cannot be recovered if entry is not achieved, but also intangible assets, such as training employees, learning about the market and designing products. *See Areeda* ¶ 421(c).

is less likely that future entrants will achieve MVS in markets where (1) entrants are unable address a portion of the market due to vertical foreclosure by incumbents and incumbents' long-term contracts that lock in demand (such as special access volume and term discount agreements in business markets);[48] (2) there is evidence that companies have attempted to enter the market and failed in the past (as is the case with many CLECs that have attempted to enter both the residential and business markets);[49] (3) customers demand an established track record of performance and customers are severely harmed if the service does not function at a high level of reliability (which is the case with telecommunications services, especially those provided to business customers);[50] and (4) incumbents possess cost advantages due to superior economies of scale (this is true of most telecommunications markets because incumbents possess substantial economies of scale and scope);[51] or because entry requires the purchase of extremely expensive

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[48] *See* Guidelines § 3.3; *Commentary* at 45 (discussing *Waste Management-Allied* (DOJ 2003)). There, the DOJ ordered a waste transport company to divest certain routes and assets because entrants would be unable to achieve MVS in their absence. A potential entrant would have had to contract with a large number of customers in a small commercial area to reach viability. The DOJ found that this was impossible because the incumbents had locked up nearly all of the demand through long-term contracts. *See id.; see also Areeda* ¶ 421(f) ("An entrant needs access to a sufficient number of customers to allow profitable operation at an efficient scale...Incumbents, however, might obstruct such access in several ways...Tying, exclusive dealing, or long-term supply contracts also narrow the universe of customers available to entrants...Whether such obstructions effectively deter entry depends on the their extent, the customer base needed for efficient production, the likelihood that new customers will themselves enter, the distribution method and the duration of the restraint.").

[49] *See Commentary* at 39.

[50] *See id.* at 40 ("A merger is especially unlikely to attract entry if product failure imposes a substantial cost on customers.").

[51] *See id.* at 38 (noting that entry may not occur if "entrants would suffer significant cost disadvantages in competing with incumbents. This situation can occur for a variety of reasons, but tends to be most important when entrants would be unlikely to achieve the economies of scale (i.e., reductions in average cost from operating at a higher rate of

facilities, the cost of which has already been amortized by the incumbent (such as the deployment of copper or fiber facilities).[52]

Entry will not be "sufficient" in magnitude, character and scope if the "tangible and intangible assets required for entry [i.e., inputs]" are not available to entrants due to the incumbent's control of these inputs or where entrants are restricted from addressing a substantial portion of the market due to the incumbent's long-term contracts.[53] For example, where an entrant seeks to deploy loop facilities to end users, it is unlikely to be able to do so profitably at the locations with limited demand for telecommunications services within an MSA. Where this is the case, the competitor would be unable to serve a substantial portion of the market. Such a competitor is unlikely to constrain the incumbent LEC's prices throughout the MSA. Rather, such entry is better understood as fringe competition.[54]

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output) and scope (i.e., reductions in cost from producing several products together) already achieved by incumbents.").

[52] *See id.* at 45 (discussing *Federal-Mogul-T&N* (FTC-1998)). There, the FTC found that "[a] new entrant that attempted to match an incumbent's product line [in ball bearings] would have been able to amortize the tooling for many bearings over the portion of the [life of the machine used to make bearings], and would necessarily have higher relative costs. This would have put any entrant in the aftermarket at a substantial cost disadvantage to the incumbent firms. Thus the Commission found that entry would not be timely or likely to prevent anticompetitive effects." *See id.*

[53] Guidelines § 3.4; *see Commentary* at 44 ("A merger may lead to price increases without attracting entry because potential entrants would be unable to obtain a source of supply for essential inputs....Difficulty in securing essential inputs can impede entry in a variety of contexts, particularly when incumbents own or control access to the inputs."); *Areeda* ¶ 422(c) (noting that entry will not be sufficient if the entrant cannot obtain "access to needed inputs or customers").

[54] *See* Guidelines § 3.4; *Areeda* ¶ 422(c) ("Especially in product-differentiated markets, new entrants may find small market niches that have little impact on market prices generally....Entry into a small corner of the market may be easy, while entry into the remainder [sufficient to affect prices] is very difficult.").

As this discussion makes clear, the FCC cannot count on future committed entry as a basis for granting forbearance. Future entry will almost certainly not be "timely," since deployment of telecommunications facilities is extremely slow. It is very unlikely that an entrant would be able to deploy facilities broadly enough to have a significant market impact throughout an MSA in two years. Future entry is not "likely" because the factors described herein (lock-up agreements by incumbents, a long history of failed entry by competitors, the need to establish a long track record of high quality service and the incumbents' cost advantages) leave little chance that a competitor will achieve MVS. Future entry will not be "sufficient" because it is unlikely that a competitor could deploy facilities to more than a relatively small subset of locations within an MSA, thereby likely preventing the competitor's offering from disciplining the incumbent's prices.

The FCC's recent track record in relying on predictions of future competition further supports this view. As discussed, in the *Omaha Order*, for example, the FCC eliminated unbundling for loops needed to provide business broadband service based on the prediction that future competition from the cable company would discipline the incumbent LEC's conduct in the wholesale business broadband market.[55] But as McLeodUSA has explained at length, this prediction has not come true.[56] The

[55] *In re Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Omaha Metropolitan Statistical Area*, Memorandum Opinion and Order, 20 FCC Rcd. 19415, ¶ 67 (2005) ("*Omaha Order*").

[56] Rather than offering reasonable wholesale pricing for DS0, DS1, and DS3 loops, Qwest has only offered McLeodUSA access to Qwest's loop facilities at special access rates. *See* Petition for Modification of McLeodUSA Telecommunications Services, Inc., *In re Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Omaha Metropolitan Statistical Area*, WC Dkt. No. 04-223, at 4 (filed July 23, 2007) ("McLeodUSA Petition"). These tariffed, special access rates are largely unregulated and substantially higher than cost-based rates for UNEs. According to McLeodUSA, Qwest's "demands include[d] priees increases in the range of 30% or more for monthly charges for DS0 stand alone loops, a minimum increase of 86% for DS1 access loops,

Commission's reliance on future entry in other contexts has been no more reliable. In the *Special Access Pricing Flexibility Order*, the FCC predicted that competitors that establish fiber-based collocations would exert competitive pressure on incumbent LECs' special access services.[57] It is now abundantly clear that this prediction was incorrect.[58] Similarly, in the *TRO*,[59] the *Wireline Broadband Order*,[60] and the *Section 271 Broadband Forbearance Order*,[61] the Commission predicted that broadband over power

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and a 360% increase in associated non-recurring charges for installing DS1 access loops." *Id.* at i. As a result, McLeodUSA publicly announced that it would discontinue its operations in the Omaha MSA if the Commission does not modify the *Omaha Order*. *See id.* at 14 ("The nine affected wire centers represent the vast majority of revenue opportunity of McLeodUSA's current and prospective customer base. Accordingly, McLeodUSA is being forced to exit all Omaha wire centers because there is simply not enough revenue potential in the unaffected Omaha wire centers to justify the ongoing operating costs of the local switching center and related expenses.").

[57] *See In re Access Charge Reform et al.*, Fifth Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd. 14221, ¶ 82 (1999) ("*Special Access Pricing Flexibility Order*") ("For all these reasons, we are confident that, in the past, the presence of an operational collocation arrangement in a wire center almost always implied that a competitor has installed transmission facilities to compete with the incumbent."); *id.* ¶ 84 ("We conclude here that a collocation-based trigger provides an administratively simple and readily verifiable mechanism for determining whether competitive conditions warrant the grant of pricing flexibility."); *id.* ¶ 88 ("Accordingly, we conclude that collocation arrangements are more likely than transport and termination agreements to demonstrate that competitors have invested in facilities sufficiently to resist exclusionary pricing behavior.").

[58] *See generally Special Access Letter* (demonstrating that incumbents' special access rates are much higher than competitors' rates given the same terms and conditions).

[59] *See Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd. 16978, ¶ 263 (2003) ("*TRO*") (subsequent history omitted).

[60] *See In re Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities*, Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd. 14853, ¶¶ 50, 56-59 (2005) ("*Wireline Broadband Order*"), *aff'd*, *Time Warner Telecom, Inc. v. FCC*, 507 F.3d 205 (3d Cir. 2007).

[61] *See In re Petition for Forbearance of the Verizon Telephone Companies Pursuant to 47 U.S.C. § 160(c); SBC Communications Inc's Petition for Forbearance Under 47 U.S.C. §*

lines, satellite broadband services, as well as fixed and mobile wireless broadband services would develop into significant competitors in the provision of broadband service. In none of these orders did the FCC attempt to determine how soon these firms could enter the business broadband market or at what price. Not surprisingly, none of the services relied upon for future entry in fact developed into significant competitors to wireline broadband.

In light of the characteristics of the telecommunications markets at issue in UNE forbearance proceedings and the unreliability of past FCC predictions of future entry, it is appropriate for the FCC to establish a presumption that it will not consider potential competition in UNE forbearance proceedings. That presumption should be rebutted only by a persuasive showing that a particular future entrant meets the criteria of likelihood, timeliness and sufficiency in the Guidelines.

Required Level of Actual Competition. While there does not appear to be any basis for relying on future entry as a basis for forbearing from unbundling requirements, the Commission should consider the extent to which existing competition is sufficient to constrain the incumbent LECs' ability to set prices above costs and harm consumer welfare. The question, then, is how much actual competition the Commission should require in a product market to justify forbearance from unbundling requirements.

As discussed, Section 10 permits the FCC to forbear only where the legal requirement in question is no longer necessary either to ensure that rates, terms and conditions are just, reasonable and not unjustly or unreasonably discriminatory or to

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160(c); Qwest Communications International Inc. Petition for Forbearance Under 47 U.S.C. § 160(c); BellSouth Telecommunications, Inc. Petition for Forbearance Under 47 U.S.C. § 160(c), Memorandum Opinion and Order, 19 FCC Rcd. 21496, ¶ 22 (2004) ("*Section 271 Broadband Forbearance Order*").

ensure that consumers are protected from harm post-forbearance. This means that there must be sufficient facilities-based competition that the incumbent cannot, either through unilateral conduct or tacit collusion with one or more competitors, charge prices that significantly exceed a fair measure of cost (e.g., forward-looking costs yielded by TELRIC), degrade service quality or slow-roll innovation. An assessment of the extent of competition under this test must consider the specific characteristics of the market, including, at a minimum (1) an assessment of the number of facilities-based competitors; (2) the extent to which those competitors' networks have already been deployed to all or virtually all of the end user locations in the MSA; (3) the extent to which such competitors have garnered market share; (4) and any evidence that the incumbent possesses substantial and persisting cost advantages as compared to competitors.

There are several guideposts that the FCC should follow in assessing these factors. First, the Commission must at the very least deny forbearance where the incumbent faces only a single facilities-based competitor. As Dr. Besen has explained, numerous theoretical models predict that "duopoly more typically leads to higher prices than would prevail in a market with a larger number of firms and that the entry of additional firms would result in lower prices."[62] Likewise, in empirical studies of various markets and industries (including those with low-entry barriers such as bid auction markets, food retailing, and tires), "a common finding is that the presence of three or more significant competitors tends to result in lower prices than those that prevail in

[62] Declaration of Dr. Stanley M. Besen at 2, attached to Letter from Andrew D. Lipman, Counsel, TDS Metrocom, LLC *et al.* & Thomas Jones, Counsel, Cbeyond, Inc. *et al.*, to Marlene H. Dortch, Secretary, FCC, WC Dkt. Nos. 08-24 & 08-49 (filed Apr. 23, 2009) ("*Besen Duopoly Declaration*").

duopoly."[63] Based on these findings, Dr. Besen has concluded that, without conducting more analysis, "the FCC cannot conclude that the presence of only two firms is sufficient to achieve a competitive outcome and they can reasonably presume that the entry of a third firm is likely to result in prices that are closer to competitive levels."[64] Moreover, given that "the presence of a third substantial competitor results in a significant reduction in prices"[65] in markets with *low barriers to entry*, this conclusion is even more likely to be true in markets with *high barriers to entry*, such as the telecommunications markets at issue in UNE forbearance proceedings. Indeed, a number of empirical studies suggest that, in some markets, the presence of a fourth, fifth or additional firms might result in even lower prices, thereby demonstrating that even three substantial firms may not be sufficient to yield competitive pricing.[66]

Chairman Genachowski recently reiterated the market benefits that flow from the presence of more than two competitors. In particular, he noted that, following the PCS auctions that increased the number of CMRS carriers from two to five "there was a drop of 50 percent in the per-minute price of cell phone service, and at the same time the number of subscribers more than tripled."[67] In fact, as Dr. Besen noted, "the FCC itself has recognized that [cellular] duopolies cannot be expected to price competitively and

[63] *Id.* at 3.

[64] *Id.* at 17.

[65] *Id.* at 8.

[66] *See id.* at 9-10.

[67] *See In re Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless including Commercial Mobile Services*, Notice of Inquiry, FCC 09-67 (rel. Aug 27, 2009), Statement of Chairman Julius Genachowski at 1, *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-09-67A2.pdf.

that the entry of additional firms could be expected to lead to lower prices."[68] There is no reason to think that wireline markets are any different.

Second, in order to have a constraining effect on the incumbent, it is critical that a facilities-based competitor demonstrate an ability to capture significant market share. For example, as Dr. Besen has explained with regard to the effect of the entry of a third competitor in a duopoly market structure, empirical evidence suggests that while the presence of a third "substantial" firm would reduce the otherwise high price-cost margins of the two leading firms in a duopoly market, "a third firm with only a small market share might have little effect."[69] In fact, one empirical study on the effect of market share distribution on industry price-cost margins has found that the presence of a third firm in a market affects prices once the third firm's market share is greater than or equal to 16 percent.[70] Similarly, evidence developed during the FTC's review of a proposed merger between two retail "superstores" shows that the presence of a third major firm had a moderating effect on prices, but the presence of smaller retail outlets did not.[71] Based on this evidence, Dr. Besen has concluded that "without further analysis, one should not be too quick to count fringe or differentiated players as being fully equivalent to major direct competitors."[72]

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[68] *See Besen Duopoly Declaration* at 11 & n.30 (citing *In re Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Services*, First Report, 10 FCC Rcd. 8844, ¶ 4 (1995)).

[69] *Id.* at 8.

[70] *See id.* n.17.

[71] *See id.* at 14 (citing *FTC v. Staples, Inc.*, 970 F. Supp. 1066, 1078 (D.D.C. 1997)).

[72] *Id.*

Third, the Commission should carefully examine the reach of competitors' networks. Competitors must reach all or virtually all of the locations needed to serve a product market in order to constrain the incumbent LEC because continued reliance on the incumbent's loop facilities will give the incumbent the opportunity to continue to exercise market power by raising its rivals' costs.

To constitute a viable alternative to the incumbent in wholesale loop markets, a competitor must have (1) constructed network facilities sufficient to cover at least 75 percent of the end user locations in an MSA and (2) developed sufficient back-office capabilities. As the Joint Commenters have explained, competitors need to be able to enter downstream retail markets throughout an MSA to achieve minimum efficient scale and the transaction costs associated with relying on more than one wholesale loop provider are prohibitive.[73] As the Joint Commenters have also explained, competitors cannot rely on a loop wholesale provider unless the wholesaler has deployed robust operational support systems ("OSS") needed to efficiently conduct ordering, provisioning, maintenance and repair functions.[74] Thus, in assessing the extent to which the incumbent faces competition in the wholesale market, the Commission should steeply discount the significance of an alternative to the incumbent unless the competitive wholesaler offers customers loop facilities throughout the MSA via a fully operational wholesale OSS.

In the retail market, the Commission need not insist that a competitor has deployed its network to a minimum number of end user locations, since, unlike wholesale

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[73] *See* Joint Commenters' April 14th UNE Forbearance Ex Parte Letter at 9-11 & nn.40-48.

[74] *See id.* at 17-18 & n.84.

customers, most categories of retail customers only purchase service at a single location. Instead, the Commission should assess the extent to which multiple non-incumbent LECs offer service over their own loop facilities to each retail customer within the MSA. As a general matter, the Commission should require that at least two non-incumbent LEC competitors reach each retail customer with the non-incumbent LECs' own loop facilities.

The one caveat to these observations regarding retail network coverage concerns multi-location business customers. In a product market in which a significant percentage of the available revenue is associated with multi-location businesses, it is necessary that the competitors' networks reach all of the likely locations in which such businesses are located in the MSA. Otherwise, the incumbent LECs will have the opportunity and incentive to exploit their control over loops serving locations that competitors' networks do not reach by, for example, denying, delaying, degrading or overpricing competitors' access to such loops.

Finally, the Commission should assess the relationship between retail and wholesale markets generally. When examining retail competition, the Commission should examine all of the major downstream retail markets that competitors serve via unbundled loops and transport facilities, including the full range of business services such as DS1 integrated services, Ethernet over copper, and so on. If there is sufficient facilities-based competition to protect customers against prices set substantially above cost in any such retail market (e.g., because of robust competition from multiple intermodal competitors that rely on their own loop facilities), then it makes sense to eliminate unbundling for purposes of serving that particular retail market. Competitors should be permitted to continue to rely on UNEs to serve the downstream retail markets in which there is insufficient competition.

When examining wholesale competition, the Commission should assess the extent to which competitive wholesalers offer substitutes for the unbundled network element facilities themselves. If there is sufficient facilities-based wholesale competition in the provision of any particular unbundled network element or close substitutes for such facilities to prevent wholesalers from charging prices substantially above cost, then the incumbent's obligation to offer the network element in question should be eliminated entirely.

IV. THE FCC SHOULD APPLY ITS NEW STANDARD OF REVIEW TO THE EXISTING FACTUAL RECORD.

The FCC should apply the standard of review it adopts on remand to the existing factual record in the 6-MSA and 4-MSA proceedings. This approach is well within the agency's discretion and is appropriate under the circumstances.

First, an administrative agency is free to make its own judgment as to whether additional fact-gathering is necessary in remand proceedings,[75] and such decisions are subject to the lenient abuse of discretion standard of review.[76] An agency need not

[75] *See, e.g., Sierra Club v. EPA*, 325 F.3d 374, 382 (D.C. Cir. 2003) (citing *Nat'l Grain & Feed Ass'n v. OSHA*, 903 F.2d 308, 310 (5th Cir. 1990)) (applying "the usual rule that a reviewing court should leave the agency free on remand to determine whether supplemental fact-gathering is necessary"); *City of Brookings Mun. Tel. Co. v. FCC*, 822 F.2d 1153, 1171 (D.C. Cir. 1987) ("In remanding this case to the Commission, we leave to its sound discretion to what extent, if any, it should reopen the record to satisfy the concerns we have articulated.") (citing *Bowman Transp., Inc. v. Arkansas-Best Freight System, Inc.*, 419 U.S. 281, 294-95 (1974)).

[76] *See, e.g., E. Carolinas Broad. Co. v. FCC*, 762 F.2d 95, 103 (D.C. Cir. 1985) ("Courts normally reverse an agency's decision not to reopen the record only for abuse of discretion."); *Bowman Transp., Inc.*, 419 U.S. 281 at 294-95.

reopen the record, even in the face of newly available evidence, if the agency determines that such evidence would not affect the final outcome of the proceeding.[77]

The FCC need not reopen the record here. As explained, the incumbent LECs, cable companies and CLECs submitted detailed evidence regarding the extent of facilities-based competition in the ten MSAs at issue in this remand right up to the close of the underlying proceedings. Since that time, it is extremely unlikely that the state of facilities-based competition has changed significantly in any of the ten markets at issue. This is because, as the Commission has found, competitors face substantial barriers to entry in deploying their own loop and transport facilities.[78] As a result, deploying local transmission facilities is a slow and uncertain process. For example, tw telecom likely deploys loop facilities to commercial buildings at a faster pace than any non-incumbent LEC, yet even tw telecom is only able to deploy approximately 1,000 loop facilities per year *in all of its 75 markets combined.*[79] Nor has there been any major technological change that has enabled a new, more efficient means of entry in the relevant markets. It is extremely unlikely that, between the close of the record in the 6-MSA proceeding (December 5, 2007) and the 4-MSA proceeding (July 25, 2008) and the present, competitors have deployed loop or transport facilities in sufficient volumes in any of the ten MSAs to materially change the result of the forbearance analysis.

[77] *See E. Carolinas Broad. Co.*, 762 F.2d at 103-04.

[78] *See, e.g.*, *TRRO* ¶¶ 150-51 & 153 (describing barriers); *see also id.* ¶ 166 (finding that "competitive deployment of DS3-capacity loops is in some cases economic" and that "competitive deployment of stand-alone DS1-capacity loops is rarely if ever economic").

[79] *See* tw telecom inc., 2008 Annual Report, at 4 (Form 10-K) (filed Feb. 24, 2009) ("In 2008, we extended our fiber network by approximately 1,000 route miles and into approximately 1,100 additional buildings in our markets.").

This is especially true given that the records in the underlying proceedings did not come close to supporting the conclusion that incumbent LECs had lost their ability to exercise market power in any of the MSAs at issue. There was no evidence of wholesale competition in either the business markets or the residential markets. Nor was there any indication that the level of retail competition in the provision of services to business customers from firms that possess their own loop facilities was close to sufficient to constrain the incumbent LECs' market power. As the Commission found, cable company networks do not reach most business customers, CLECs have not been able to deploy loops to more than a tiny percentage of the tens of thousands of commercial buildings in each MSA, and wireless services are not substitutes for wireline retail services offered by competitors via UNEs to business customers.[80] The level of competition in the provision of residential telephone service was substantial as measured by the Commission's standard of review, but that standard of review vastly overstated the extent of competition by including mobile wireless service in the residential wireline telephone market without any basis for doing so. If mobile wireless carriers are excluded from the wireline market, it is clear that competition is insufficient to justify forbearance in that market because, at best, the market is a duopoly.

It is also worth noting that Verizon and Qwest are free to file a new petition for forbearance in any market in which facilities-based competition does develop

[80] *See 6-MSA Order* n.116 ("Most of the cable operators state that their networks are primarily in residential areas and their provision of services to enterprise customers are still in the initial stages"); *id.* ¶ 41 ("Verizon does not provide any comparative data for the number of buildings with demand for high-capacity services or lit buildings that Verizon serves, and the percentage of all commercial buildings that competitors light is extremely small on a relative basis--only 0.25 percent in the 6 MSAs, with the highest percentage in Virginia Beach of only 1.9 percent.").